Electronic Mail as an Effective Medium for Information Services

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1. INTRODUCTION

The recent trends in communication has provided a large boost for electronic transactions and communication. It has become a legitimate and valuable means of communication. From the day when computers were first linked together through some form of a network, computer users have been sending messages to each other over the wires. As the Internet grew in the 1990s, so did the legitimacy of the Internet and Electronic mail communication. E-business, e-commerce, and e-governance have emerged.

Now with the worldwide presence of the Internet, computer networks handle trillions of messages every day. Electronic mail, or e-mail, is one of the most commonly used services on computer networks and the Internet. E-mail has become one of the primary forms of communication for individuals everywhere. E-mail is primarily used to send and receive text based messages such as personal or buisness letters, orders, reports and statements. It has been observed that 70 percent of Internet traffic is towards e-mail communicaton alone. The major attraction of e-mail is its instant delivery. Despite the distance between the sender and the receiver, an e-mail message can find its way anywhere in the world within minutes. E-mail has a way of drawing the global community closer together.

The first e-mail was sent in 1971 by Ray Tomlinson of ARPANET (Advanced Research Projects Agency Network). For several years, e-mail remained mostly private, used only by computer scientists, the military, and then colleges and universities. MCI Mail and CompuServe teamed up in 1989 to provide the first commercial electronic mail connection to the Internet through the Corporation for the National Research Initiative (CNRI) and Ohio State University. In 1991, the World Wide Web, developed by Tim Berners-Lee, was released by CERN, the European Council for Nuclear Research in Geneva, Switzerland.

America Online and Delphi started to connect their proprieary e-mail systems to the Internet in 1993. This was a significant step toward the adoption of e-mail by the general public. E-mail has become an increasingly common tool for communication over the past decade. In the beginning, it was viewed as a very informal means of communication. Typically, individuals used it for their personal needs rather than for business use. But as time grew, for businesses, e-mail has become a targeted channel of communication to potential customers about their products and services.

2. METHODOLOGY

An e-mail message is simply an electronic note sent between computer users over the Internet or some other computer network. The message is usually prepared on a user's computer using an e-mail program or software. Otherwise, users connect online to an Internet service provider, or Internet Service Provider (ISP), to prepare their e-mail.

After the users composed the messages, they instruct the e-mail program to send the message to a specified recipient. The e-mail program then transfers the messages to the ISP's computer which specifically handles e-mail. This computer is called an e-mail server, as it serves the requests of the e-mail users. When the e-mail server gets a message to be sent, it first identifies the destination of the message. Then as needed, the server transfers the message to another e-mail server which routes the message

closer to its ultimate destination. Depending on the path followed, the message could be transferred through a few e-mail servers as it makes its way to its destination.

After its trek through the Internet, and other networks, the message reaches the destination e-mail server. The message is kept on the server until the recipient asks to get his/her e-mail. Then from time to time, as the user runs e-mail program, e-mail users asks for any incoming e-mail messages waiting for them. The e-mail program transfers or downloads the users e-mail from the server to their own computers. Then the users can read their messages. Alternatively, a user might read e-mail online with the ISP's services. Although it may seem like a long and drawn out process, it is very fast and the actual transmission route is immaterial to the users.

The typical parts of an e-mail message are the letter or message, the recipient's address, the subject line and the sender's address. Some of the additional features are the Header Information, Signature at the bottom of the message containing brief information about the sender along with sometimes 'humorous or philosophical' quotes. Although there are various types of e-mail, the features are more or less common.

3. ADVANTAGES OF E-MAIL

Some important advantages of e-mail are enumerated here.

(a) E-mail can be retrieved and read at a time and place that is suitable;

(b) It can be sent to multiple locations and people with carbon copies at the same time;

(c) One can mark "blind carbon copies" to recipients;

(d) E-mails can be exchanged within a very short time to any number of people;

(e) One can include the text of a previous e-mail message as part of a reply to a message;

(f) Copy and paste text from other messages or files;

(g) Automatic reply is possible without having to enter the sender's address again;

(h) The receiver can forward the same message to others;

(i) Can be sent to large groups of people through distributed lists or groups, for example 'Listservs", "Discussion Forums" etc.

(j) Multimedia material including images, audio, video files can be sent as attachments;

(k) Digital signatures can be incorporated at the bottom of the message for official transactions;

(l) It can be sent and retrieved from any computer anywhere in the world;

(m) Messages can be kept postponed for any time before sending;

(n) Messages can be saved under 'folders' or 'directories' for easy retrieval;

(o) E-mails save communication costs;

(p) E-mail provides an efficient, cheap and fast means of communication for business organizations;

(q) Yahoo, Rediff, Hotmail, India times etc. offer free e-mail up to certain amount of defined space for sending/accessing mails; and

(r) Advanced technologies for sending/accessing e-mails through Digital television, WAP or SMS mobile phones have been made available in recent times.

4. PUBLIC DOMAIN E-MAIL SERVICES

Public domain refers to any program that is not copyrighted. Public-domain software is free and can be used without restrictions. The term public-domain software is often used incorrectly to include freeware, free software that is nevertheless copyrighted. Yahoo, Rediff, Hotmail, VSNL, Freemail, Sify are some of the popular public domain e-mail accounts providing a certain amount of defined space for sending/accessing e-mails.

There are also a good number of domain name resources on the Internet like DomainRedirect.com, TargetFindus.com etc., Google's free Gmail is packed with innovative features such as message threading and fast searching. Gmail provides a full 1 gigabyte of server space and does away with both banner and pop-up ads, relying instead on sponsored links similar to those on Google's search engine page.

Gmail has a controversial aspect in the way it handles advertising. Gmail automatically scans e-mail and displays ads that may be relevant to messages' content. Gmail's privacy policy states that no humans view your e-mail; that only a limited set of employees can access user accounts for quality, security, audit, and other internal business purposes; and that any such access is recorded. Instead of being embedded in e-mail messages, ads are placed on the Web page in a column alongside messages, much the way they appear in Google search results.

5. E-MAIL PROGRAM FEATURES

Many commercial and shareware e-mail programs are available in the marketplace. One popular e-mail program is Eudora, which is available commercially and as shareware. There are e-mail programs included with some web browsers, for instance Netscape, Microsoft Outlook Express etc.

5.1 Personalizing E-mail Marketing

If one is looking for a way to increase the response to your e-mail marketing efforts, you should definitely consider personalization. E-mail marketing programs such as Broadcast [http://www.html-publishers.com] can automatically compose and send mass e-mail messages with personalized fields and content, driven by a database. E-mail alerts keep users informed about the latest news in their interested disciplines.

5.2 How to Write Effective E-mails for Mailing List

With every passing day, increasing numbers of people are becoming web designers. One of the main forums for communication among web designers, both beginners and experts

alike, is the mailing list. Most mailing lists generate a substantial stream of useful, information-laden email, and the good ones enjoy a healthy gift economy. Several types of e-mail marketing toward e-mail alerts are available like journal table of contents, early release articles alerts, announcements, new issue articles, etc.

6. DISADVANTAGES OF E-MAIL

The drawbacks of e-mails include receiving junk or SPAM mails and unwanted multiple copies, lengthy download time for mails and attachments-especially images, and inappropriate attachments format.

6.1 Spam Mails

Every day, millions of people receive dozens of unsolicited commercial e-mails, known popularly as 'spam'. Some users see spam as a minor annoyance, while others are so overwhelmed with spam that they are forced to switch e-mail addresses. Junk e-mail, a.k.a. spam, inconveniences tens of millions of Internet users and imposes huge costs on ISPs. Armed with lists of e-mail addresses, 'spammers' send billions of e-mail messages every day-messages that most users don't want.

It is often difficult or impossible to tell how a spammer acquires a user's e-mail address. Was it a result of some activity the user engaged in? Did the user give his/her e-mail address to the wrong person? Was the user randomly targeted? Are there steps the user could take to avoid such spam in the future?

There has been quite a good number of studies to answer some of these questions by analyzing common activities of Internet users and looking for evidence of some activities that resulted in one e-mail address receiving more spam than others. These studies have provided users and policymakers with a better understanding of the problem and some guidance about how to better avoid spam in the future.

Inevitably, e-mail users are subjected to the spam of un-requested messages designed to sell an idea or a product. One of the very few good things about spam is that it reminds you of how

e-mail is not a totally private space. Many e-mail programs have built-in filters to block junk e-mail; these help to separate spam from the required e-mail. For example, Hotmail stops receiving junk e-mail or delete junk e-mail before it arrives. One can also be able to enlist the help of the ISP.

Spam, viruses, fraud and other security breaches are inundating e-mail system servers and user mailboxes. E-mail today is under siege and, as users clamor to harness its potential, they have only a fragile framework in place regulating its use, protecting their privacy and safeguarding their networks.

6.1.1 Tips for Avoiding Spam

Disguising e-mail addresses posted in a public electronic place, reading and exercising choice carefully when filling out online forms requesting e-mail address, using multiple e-mail addresses or filter are some of the ways to avoid unsolicited mails. Short e-mail addresses are easy to guess, and may receive more spam.

Despite its disadvantages, E-mail has become a dire necessity in our lives. Access to e-mail is quickly becoming as easy and commonplace as the telephone. As the Internet continues to become a regular part of our lives, e-mail will continue to be a popular method of communication between computer users.

7. CONCLUSION

In the future, we can expect to see more and more advanced e-mail systems. These systems will improve over time to make transactions easier and faster. And, since most e-mail systems are not secure, we can also expect improvements in Internet security, a must if more sensitive information is going to be sent electronically. There has also been discussion of creating a network specifically for government agencies that will not be accessible to the general public. This would further increase the security of not only e-mail, but of specific agencies' internal Web sites as well. These are just a few of the advances we can expect in the years to come. To conclude, today, however, most of the planet's 6.1 billion inhabitants are within reach of e-mail service; for the first time in history there are now more e-mail subscribers worldwide than there are households".